

CLAIMS:

- 5 1. A method of treating an object for disinfection, preferably sterilization thereof, comprising the steps of:

providing a flow of a fluid containing ozone of a known concentration;

- 10 passing said flow of fluid over the object to be disinfected or sterilized inside a confined space;

continuously monitoring the concentration of ozone in said flowing fluid at a position downstream of said object;

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terminating the flow of said fluid containing ozone no earlier than at a point in time when the concentration at said position downstream of said object meets a predetermined criterion.

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2. The method as claimed in claim 1, wherein the fluid is ozone gas.

3. The method as claimed in claim 1, wherein the fluid is ozone water.

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4. The method as claimed in claim 1, wherein said confined space is a sterilization/disinfection chamber adapted to receive at least one object to be sterilized/disinfected .

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5. The method as claimed in claim 1, wherein the object to be disinfected or sterilized is the inner walls of an internal channel system of an apparatus, said channel system forming said confined space itself.

6. The method as claimed in claim 5, wherein said internal channel system of said apparatus is segmented into a plurality of segment, each of which are exposed to said flow of fluid one at a time until sterilized or disinfected.

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7. The method as claimed in claim 1, wherein said predetermined criterion is a predetermined concentration value.

5 8. The method as claimed in claim 1, wherein said predetermined criterion is met when the concentration at said position downstream of said object is constant or fluctuates only within a certain predetermined concentration interval.

9. The method as claimed in claim 8, wherein the determination of whether the
10 concentration at said point downstream of said object is constant, is carried out by
measuring the concentration upstream and downstream of said object;
forming the difference between said measurements; and
terminating the flow of said fluid containing ozone when the difference is below a
predetermined value.

15 10. The method as claimed in claim 1, wherein the determination of whether the
concentration at said point downstream of said object is constant, carried out by
measuring the concentration downstream of said object;
forming the difference between consecutive measurements;
20 terminating the flow of said fluid containing ozone when the difference is below a
predetermined value.

11. The method as claimed in claim 1, wherein the determination of whether the
concentration at said point downstream of said object is constant, carried out by
25 measuring the concentration downstream of said object;
continuously calculating the derivative of the concentration;
terminating the flow of said fluid containing ozone when the derivative is below a
predetermined value.

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